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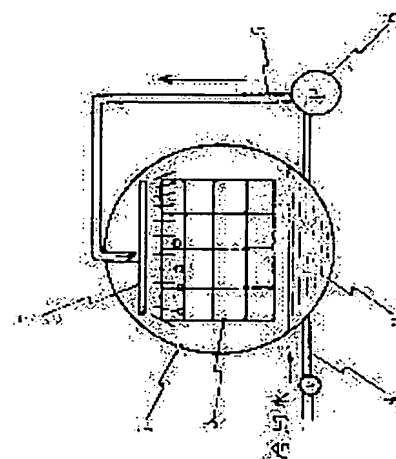
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A23L 3/12(21)Application number : **01-288799**(71)Applicant : **TOYO SEIKAN KAISHA LTD**(22)Date of filing : **08.11.1989**(72)Inventor : **KOIKE HIDETOSHI
SENBON KATSUMI****(54) COOLING METHOD IN RETORT STERILIZATION**

(57)Abstract:

PURPOSE: To improve the uniformity of the temperature of food in cooling by charging cooling water at the bottom part of a retort pot in a steam retort sterilization, heating the cooling water with steam during the sterilization process and spraying the hot water to the sterilizing object while slowly cooling the water with chilled water.

CONSTITUTION: A sterilizing object 3 is placed in a retort pot 1 and sterilized by heating with steam 4. The sterilizing object is cooled by the following method in the above sterilization process. Cooling water 2 is introduced to the bottom part of the retort pot 1 to an extent not to directly contact with the sterilizing object 3 and the introduced water is heated to the sterilization temperature with steam during the sterilization process. In the cooling step, the heated cooling water 2 is sprayed from above in the form of shower (with a shower plate 7) and cooling water is slowly introduced from the outer source 4 to the bottom of the pot to slowly lower the temperature of the cooling water circulating in the retort 1 (with a pump 6 and a circulation pipe 5). The sterilizing object 3 can be slowly cooled by this process under controlled rate of temperature decrease in the retort 1.

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